



Amend claim 18, cancel claims 1-17, 20 and 22, and add new claims 25-34 as follows:

1-17. (cancelled)

18. (currently amended) A method for cooling fluids used in an engine of a motor vehicle, comprising:

providing a heat exchanger assembly comprising:

a first heat exchanger for cooling a first fluid having opposite front and rear faces through which cooling air flows, opposite first and second ends adjacent the faces, and sides adjacent the faces between the first and second ends;

a second heat exchanger for cooling a second fluid having first and second portions, each second heat exchanger portion having opposite front and rear faces through which cooling air flows, opposite first and second ends adjacent the faces, and sides adjacent the faces between the first and second ends, and including first and second manifolds at the extending across the first and second ends, respectively, of each second heat exchanger portion, and fluid-carrying tubes extending substantially directly therebetween between the first and second manifolds of each second heat exchanger portion,

one of the second heat exchanger portions being disposed in overlapping relationship and adjacent to the first end of the first heat exchanger with the

first and second ends of the one of the second heat exchanger portions being oriented in the same direction as the first and second ends of the first heat exchanger, wherein one face at the first end of the first heat exchanger is disposed adjacent one face of the one of the second heat exchanger portions,

the other of the second heat exchanger portions being disposed in overlapping relationship and adjacent to the second end of the first heat exchanger with the first and second ends of the other of the second heat exchanger portions being oriented in the same direction as the first and second ends of the first heat exchanger, wherein the other face at the second end of the first heat exchanger is disposed adjacent one face of the other of the second heat exchanger portions,

the second heat exchanger portions being operatively connected such that the second fluid may flow between the second manifold of the one of the second heat exchanger ~~portion~~ portions and the first manifold of the other of the second heat exchanger portions;

flowing the first fluid through the first heat exchanger;

flowing the second fluid through the substantially directly extending tubes of the second heat exchanger portions and between the second manifold of the one of the second heat exchanger portions and the first manifold of the other of the second heat exchanger portions; and

flowing cooling air through the heat exchanger assembly such that the cooling air flows sequentially first through ~~both~~ the first end of the first heat exchanger and subsequently through the one of the second heat exchanger portions, and the cooling air also flows sequentially first through ~~both~~ the other of the second heat exchanger portions and subsequently through the second end of the first heat exchanger, to cool the first fluid in the first heat exchanger and the second fluid in the second heat exchanger portions.

19. (original) The method of claim 18 wherein the second fluid flows in sequence through the second manifold of the other of the second heat exchanger portions, the substantially directly extending tubes of the other of the second heat exchanger portions, the first manifold of the other of the second heat exchanger portions, the second manifold of the one of the second heat exchanger portions, the substantially directly extending tubes of the one of the second heat exchanger portions, and the first manifold of the one of the second heat exchanger portions.

20. (cancelled)

21. (original) The method of claim 18 wherein the second fluid flows in sequence through the first manifold of the one of the second heat exchanger portions, the substantially directly extending tubes of the one of the second heat exchanger portions, the second manifold of the one of the second heat exchanger portions, the first manifold of the

other of the second heat exchanger portions, the substantially directly extending tubes of the other of the second heat exchanger portions, and the second manifold of the other of the second heat exchanger portions.

22. (cancelled)

23. (original) The method of claim 18 wherein the first heat exchanger is a radiator and the first fluid is engine coolant, and wherein the second heat exchanger is a charge air cooler and the second fluid is charge air, each of the radiator and the charge air cooler portions being cooled by ambient air.

24. (original) The method of claim 18 wherein the first heat exchanger is a charge air cooler and the first fluid is charge air, and wherein the second heat exchanger is a radiator and the second fluid is engine coolant, each of the charge air cooler portions and the radiator being cooled by ambient air.

25. (new) The method of claim 18 wherein the dimension between the first and second ends of the second heat exchanger portions is less than the dimension from one side of the second heat exchanger portions to the other side of the second heat exchanger portions, such that the fluid-carrying tubes extend across the shorter dimension of the faces of the second heat exchanger portions, and wherein, in each second heat exchanger

portion, the second fluid flows between the first manifold and the second manifold through the tubes extending across the shorter dimension of the face thereof.

26. (new) A method for cooling fluids used in an engine of a motor vehicle, comprising:

providing a heat exchanger assembly comprising:

- a radiator for cooling engine coolant having opposite front and rear faces through which cooling air flows, opposite upper and lower ends adjacent the faces, and sides adjacent the faces between the upper and lower ends;

- a charge air cooler for cooling charge air having upper and lower portions, each charge air cooler portion having opposite front and rear faces through which cooling air flows, opposite upper and lower ends adjacent the faces, and sides adjacent the faces between the upper and lower ends, and including upper and lower manifolds extending across the upper and lower ends, respectively, of each charge air cooler portion, and fluid-carrying tubes extending substantially directly between the upper and lower manifolds of each charge air cooler portion,

- the upper charge air cooler portions being disposed in overlapping relationship and adjacent to the upper end of the radiator with the upper and lower ends of the upper charge air cooler portion being oriented in the same direction as the upper and lower ends of the radiator, wherein the rear face

at the upper end of the radiator is disposed adjacent the front face of the upper charge air cooler portion,

the lower charge air cooler portion being disposed in overlapping relationship and adjacent to the lower end of the radiator with the upper and lower ends of the lower charge air cooler portion being oriented in the same direction as the upper and lower ends of the radiator, wherein the front face at the lower end of the radiator is disposed adjacent the rear face of the lower charge air cooler portion,

the charge air cooler portions being operatively connected such that the charge air may flow between the lower manifold of the upper charge air cooler portion and the upper manifold of the lower charge air cooler portion;

flowing the engine coolant through the radiator;

flowing the charge air in sequence through the upper manifold of the upper charge air cooler portion, the tubes of the upper charge air cooler portion, the lower manifold of the upper charge air cooler portion, the upper manifold of the lower charge air cooler portion, the tubes of the lower charge air cooler portion, and the lower manifold of the lower charge air cooler portion; and

flowing cooling air through the heat exchanger assembly such that the cooling air flows sequentially first through the upper end of the radiator and subsequently through the upper charge air cooler portion, and the cooling air also flows sequentially first through the lower charge air cooler portion and subsequently through the lower

end of the radiator, to cool the engine coolant in the radiator and the charge air in the charge air cooler portions.

27. (new) The method of claim 26 wherein the dimension between the upper and lower ends of the charge air cooler portions is less than the dimension from one side of the charge air cooler portions to the other side of the charge air cooler portions, such that the fluid-carrying tubes extend across the shorter dimension of the faces of the charge air cooler portions, and wherein, in each charge air cooler portion, the charge air flows between the upper manifold and the lower manifold through the tubes extending across the shorter dimension of the face thereof.

28. (new) The method of claim 26 wherein the radiator includes fluid-carrying tubes extending in the same direction as the fluid-carrying tubes of each of the charge air cooler portions, and wherein the engine coolant flows through the radiator fluid-carrying tubes.

29. (new) The method of claim 26 further providing at least one of the sides or ends of the radiator extending outward of a side or end of one of the charge air cooler portions, and wherein the cooling air flows through the outwardly-extending radiator side or end without flowing through the charge air cooler portions.

30. (new) The method of claim 26 further providing the upper end of the radiator extending outward of the upper end of the upper charge air cooler portion, and wherein

the cooling air flows through the outwardly-extending radiator upper end without flowing through the charge air cooler portions.

31. (new) The method of claim 26 further providing the upper end of the radiator extending outward of the upper end of the upper charge air cooler portions and the lower end of the radiator extends outward of the lower end of the lower charge air cooler portion, and wherein the cooling air flows through the outwardly-extending radiator upper and lower ends without flowing through the charge air cooler portions.

32. (new) The method of claim 26 further providing at least one of the sides or ends of one of the charge air cooler portions extending outward of a side or end of the radiator, and wherein the cooling air flows through the outwardly-extending charge air cooler sides or ends without flowing through the radiator.

33. (new) The method of claim 26 wherein the charge air cooler portions are operatively connected such that the charge air may flow between the lower manifold of the upper charge air cooler portion and the upper manifold of the lower charge air cooler portion around both sides of the radiator.

34. (new) The method of claim 18 wherein the second heat exchanger portions are operatively connected such that the second fluid may flow between the second manifold

of the one of the second heat exchanger portions and the first manifold of the other of the second heat exchanger portions around both sides of the first heat exchanger.